

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: ddw2@Lehigh.EDU (Dah-Jyuu D. Wang)
Subject: [3058] 20m SSB QRP
Message-ID: <199509051952.PAA87364@ns1-1.CC.Lehigh.EDU>

Dear QRP-Lers,

Had finally finished my 20m SSB QRP project (took almost 2 years since I started everything from scratch, including PCB). It was a rig based on a single conversion RX (MCL SBL-1 for mixer, 2 MC1350 IF, AGC and another SBL-1 for detector) and a simple Tx (Ne602 Mixer, 2n2222, 2n5109 drive and an IRF511 final) with an output of about 1 Watt on my Tek453 scope. Tested the thing last Friday, no smoke just like the NN1G MKII I built last time. I think building them slowly helps as I had found a lot of time when I put stuff together hastily, I almost always quaranteed for some smokes.

Calling CQ for a while w/o takers. Went camping for three days in a log cabin at French Creek state park, PA. Took the rig with me plus a Hustler ant on the car roof. Calling CQ still no taker. Went home Sunday, hooked the rig up to my dipole in the attic. Calling CQ again for a while, nothing, tuning the dial around and found a +20 db signal, decide to give it a try. Bingo! W5ZR/126 in Louisiana came back with part of my call sign. Got a 55 report, not bad for 1 watt. He does have a good antenna (an 4 element quad) and a good pair of ears. My next project probably will either be the "Hall Mark" digital voice record/player (QST article) or a booster amp (5W or something) as running 1w on 20m is not as pleasant as 1w CW on 40m. I would love to find out where does QRPer hang out on 20m, Is there an official SSB QRP frequency on 20m? I am also interested in operating tips from SSB QRPer who own/operated 20m SSB QRP rig like MFJ or QRP+.

Like to thank the folks for helping me out on this project by providing infos and leads. Special thanks to LB/W4RNL for providing me a copy of an 20m transceiver article.

Looking forward to the 100+ Cascade kits that will be on the air soon (has anyone received it yet?). I would love to order the Cascade but I am trying to keep the ambient noise (from my XYL) down a little, 8-) .

That's all folks.

73 de D.J./ N2YKP

=====

D. J. Wang, Ph.D./ N2YKP
Director of Instrumentation
ddw2@lehigh.edu
(610)758-3463 (Ph)
(610)758-3461 (Fax)

Lehigh University
Chemistry Department
Seeley G. Mudd Bldg.
6 E. Packer Ave.
Bethlehem, PA 18015

=====
From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: adam@philadelphia.libertynet.org (Adam O'Donnell)
Subject: [3059] Any regrets over SWL-30?
Message-ID: <9509052051.AA08581@philadelphia.libertynet.org>

I am about to pick up a SWL-30 kit. Anyone have any regrets over it?
How big is the QRP subband on 30? Is it totally covered by the radio?

Is this a good buy for the money?

73

--
Adam O'Donnell, N3RCS
Amsat: N3RCS@AMSAT.ORG
Internet: ADAM@LIBERTYNET.ORG

"I want to know how God created this world. I am not interested in this or that phenomenon. I want to know His thoughts, the rest are details."

-- Albert Einstein

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: bmitchel@cba.Kodak.COM (Brad Mitchell)
Subject: [3044] Best Mobile HF?
Message-ID: <9509051217.AA25410@iiatasun.CBA.Kodak.COM.cba.Kodak.COM>

Hi all,
I'm interested in hearing what you all might consider the best mobile HF rig. I'm thinking about buying a scout but would consider older all band rigs that are small as well.
I'll operate SSB and CW on 40 meters almost exclusively.
Possibly 20 meters on occasion.
It doesn't have to be qrp either. (I'm a sinner)
73 Brad WB8YGG

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995

From: "John A. Evans" <jaevans@cos.cst.titan.com>
Subject: [3046] Dual Tree Supports for Vertical Loop
Message-ID: <199509051445.KAA1406896@nss1.CC.Lehigh.EDU>

Greetings All,

Hope you had a nice long weekend. I spent the majority of the weekend out running odds-and-end shopping trips but I did spend all day Monday with my trusty slingshot and fishing reel combo so I can get up some wire before the snow sets in here in Black Forest, CO. The first tree was the most difficult, but once I got the line over it, the remaining three trees went much faster.

One word of advice for other cheapskates out there. Use a single length of nylon cord for your support. Knots do not travel well when pulled by 10 pound nylon fishing line over 70 foot Ponderosa Pine trees. I snapped my line with the nylon cord a mere 20 feet above the ground. It took an arrangement of extended tent poles duct-taped to a kitchen sponge mop (the kind that clamshell shut when you strain the sponge) while 16 feet up a ladder to grab the end of the nylon cord and bring it to earth.

Before I ask my question about weighted pulley supports for one of the antennas, I would like to describe my planned setup. I have nylon rope supports in 4 tress now - 3 are mostly in line and will support a 300 foot doublet fed with twinlead to a tuner. The plan is to support the center of the doublet with a section of nylon rope to the center insulator and place the pulley and counterweight arrangements on the doublet ends (I hesitate to call this a dipole since it will not be cut for any particular frequency).

The 4th tree is 61 feet away from and perpendicular to my center support tree and is looking like a nice spot for a 60' x 40' vertical loop. My question - How should I support the vertical loop corners between the two trees? I am thinking about a pulley/weight arrangement for the corners on one side with nylon cord supports to the tree at the other. Also, does anyone have strong feelings about how the loop should be polarized (since I have a choice)? I will initially be using it on bands to test performance, but from what I have read, polarization is not a big deal on HF.

I plan on feeding both antennas with twinlead from a tuner and will initially use a Century 21 (turned down to qrp of course) with assembly plans for my Norcal 40A, NE 40-40, and Cascade later in the winter.

72
john, n3qoo

John A. Evans
Office: (719) 528-1800 x164

Chief System Administrator
Titan Client/Server Technologies

Fax: (719) 528-1275 1115 Elkton Dr, Suite 200
email: jaevans@cos.cst.titan.com Colorado Springs, CO 80907-3535

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: Jeff Gold <JMG@tntech.edu>
Subject: [3048] four bander.
Message-ID: <01HUWY1I2NG89D5B39@tntech.edu>

All,

did it again.. forgot to mention the four bands:

80-40-30-20

72,73

Jeff, AC4HF

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: lhalliday@creo.bc.ca
Subject: [3050] Japanese inductors
Message-ID: <9508058103.AA810319170@mail.creo.bc.ca>

I'm cannibalizing a dead VCR and a couple of dead TV sets for parts, and they're loaded with little RFCs - if I could only decipher their markings!

The items are little blobs with radial leads. The body colour is either pastel lavender (most of them), or pastel blue (a few). Typical markings are a brown dot on one end, a gold dot on the other end, and a brown and green dot on top. This suggests 150 uH. Does this sound sensible?

I know, this is a perfect excuse to buy a new DMM that measures L and C - but I thought I'd check with the list first...so much nicer than the usually-somewhat-surly local electronics store. :-)

With winter coming up for us northern hemisphere folks, please allow me to reiterate that stripping dead consumer electronics for parts is a fine activity for winter evenings, and a great - not to mention cheap - way to build up your junkbox. I have salvaged dual-gate MOSFETs (e.g. 3SK51), power transistors (e.g. 2N3866), FETs (MPF102, 2N3819, various 2SK), numerous crystals (usually 3.58 MHz), variable

capacitors (some with nice reduction drives - UHF tuners, transistor radios), switches, knobs, little speakers, IF can transformers, wire in any colour you could ever want (the VCR alone has hundreds of meters of wire in it!), and, of course, innumerable resistors, capacitors and inductors. Much of this stuff is available for hauling it away.

73 from Burnaby,
laura VE7LDH

Email: lhalliday@creo.bc.ca / ve7ldh@amsat.org

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: burdick@interval.com (Wayne Burdick)
Subject: [3049] KC1 info
Message-ID: <v02130505ac7236ab15b1@[199.170.106.28]>

There seem to be many questions about the KC1 lately. I'll be happy to send the full text of the "Operation" section of the manual by e-mail to anyone who's interested. It's too long to send to everyone.

I took the KC1 to the NorCal meeting on Sunday and demonstrated all of the new features, including use of the "repeat word" symbol which saves a lot of message memory (really helps when you have only 50 bytes of EEPROM for messages). Thanks again to all of the NorCal members who have helped with testing and manual review, especially Stan Cooper, K4DRD, and Bob Warmke, W6CYX. (By the way, 'CYX, who is a famous critic of keyers, says he likes the KC1 better than the Super CMOS II....high praise! Of course it's apples and oranges, but it makes the designer feel good.)

73,
Wayne
N6KR

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: nwqrp@scn.org (SCN User)
Subject: [3041] Micro Broadcasting Kits
Message-ID: <199509050313.UAA26525@scn.org>

QRP-L Gang,

The most interesting event of my Labor Day weekend was stopping by the Food Not Bombs (Seattle) meeting to hear about "Micro Broadcasting".

You may have heard about this Pirate "QRP" movement through the mainstream news media of San Francisco and Berkely CA. It appears that for the last several years politically motivated individuals have set up tiny FM broadcast stations and have even won a court case over it. (The court denied the FCC a preliminary injunction to stop the broadcasts of Free Radio Berkeley, based on constitutional/free speech grounds.)

Of interest to QRPers are kits offered by Free Radio Berkeley. They offer quite a selection of transmitters, amps, antennas, and other accessories. I saw an early 5w model which had a nice professionally made pc board, and include pre-wound coils. I would assume that if the price/quality were right, it would be worth converting them for 2m or 6m. The email address for FRB is frbspd@crl.com.

If you are interested in Food Not Bombs, call 1-800-884-1136. If you want to know about the meeting I went to write me at nwqrp@scn.org.

Disclaimer: I do not advocate the breaking of any laws for whatever purpose. Further, I have no monetary or other interest in any organizations listed above. I am not a member of Food Not Bombs. The NW QRP Club is not affiliated in any way with "Micro Broadcasting", pirate radio, FRB, or any illegal use of radio.

--Brian, KV9X

--
i NorthWest QRP Club -----
-=[scn]=- --0---/\--
)|(nwqrp@scn.org /^\^/ ^^\
/_|_ \ http://www.scn.org/scripts/menus/n/nwqrp/nwqrp.menu --NW QRP--

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: Marrie Rosenbrand <100543.124@compuserve.com>
Subject: [3056] NorCal40A It's alive!
Message-ID: <950905180201_100543.124_EHK93-1@CompuServe.COM>

Hi Gang,

Here is the follow-up on my experiences with the famed NorCal40A. At about 8:30pm (reduced rates to the USA after 8:00pm local time) I called Bob at

Wilderness. He suggested the same as many others on this list whom graciously lended me a virtual helping hand (credits to follow!).

It was a short alright, but not my mistake (snigger). There I was, with a maglite torch between my legs (much like a fallic illuminating thingoid :-)) searching for irregularities caused by humble me, or powers beyond my command...

'So Dorothy', said the scarecrow, 'the good witch said whe had to follow the thin green road and look for putty stuff'. 'Oh my', Dorothy said, 'Do you really think the wicked witch blocked the road that way, oh my oh my....'

'Don't fear Dorothy, I, the tin man will hack a path to freedom with my Gell Cell heated two-hand axe.'

And so they went, never leaving the thrusted green lines that somehow, somewhere would lead to freedom. Along the way they met all sorts of strange structures. Some tall, some low to the ground multi-legged contraptions, until the scarecrow yelled. 'Look! look there! Putty stuff!! The tin man came running, swinging his glowing axe. Sparks everywhere, and soon the way was open for the company of three to roam around freely. Little did they know that they won a battle, but not the war.....

Scene of the crime was at R24. The perp; some splashed through soldermask or foil (whatever). You see, when you hold the board at the light (solderside away from you) you'll see, at most cases, a neat circle around a component. Unless there is a deliberate line offcourse.

At R24 the 'connection' looked suspicious 'cause of it's distorted look. After carefully scratching it away with a pocket-knife and afterwards brushing the debris away I decided to apply power (with trembling hands I might add :-)).

DMV at the ready (knowing I had a few seconds before U5 would become too hot to handle). Switched on and measured a cool 7.95 Volt. Waited for a minute or so touching U5 to check for excessive temperatures. No weird things happened (for now...). Started to measure various point and all was well.

One lousy piece of foil. Grrrrr!!

I had a very difficult time aligning the reciever. Audio was very very poor. Untill I discovered R6 (AGC) was fully counterclockwise. My only excuse is that it was 1:00 am (I'm on holiday :-)). After turning it up somewhat things looked alot better. In fact, I was amazed by the amount of audio coming from this little beauty. Used my FT890 to find the low end of the vfo. In my case I set it at 7.000 MHz, as 7.030 is the main QRP frequency in Europe. Upwards it's only data and voice traffic.

Up until that I hadn't heard a single dit :-) Why? Well, in Europe we have the dubious honor of being bombarded by MegaWatts of RF. Personally I am about 150 kms from Radio Netherlands. God knows how close the Belgians are. And I think only a few of them ever heard of QRP, the rest thinking it's some dark and evil antedeluvian demigod.

Anyway, after putting an ATU inline... Heaven! Sigs from all around Europe you wouldn't believe. DL, G, OK, SP, SL, EA, F and even heard some WA, KB and a VE!!!

Unfortunately, the tx side isn't working (yet), so I think the old witch still has some cards up her sleeve :-) I got no (side)tone and no RF output whatsoever. Shame huh, I had my Shurr key ready for some serious machine-gunning :-)

Bottom line. Check the board holding it at the light, before even thinking stuffing it with components and the like. It pays to be paranoid. Murphy is awaiting patiently for lesser minds like my own :-))

European builders with a good antenna. Be sure to have an ATU ready.

Many thanks go to (in order of appearance); Paul N6HCS, Paul AA4XX, Charlie KB8BWE, Stan N6ULU, Bill N8ET (Kanga US), Grover Tolliver, Nils WB8IJN (alcoholic beverages were consumed after termination of the ground :-)), Ron KU7Y, LB W4RNL, Mike KE4PC and Walt WA4KAC, and ofcourse to all of those who responded after I mailed this one.

You all had it right, and I am honored to be part (albeit mostly reading) of qrp-l and the qrp community in general.

bncu sn on 40 :-)

73 es 72

Marrie
PA3FZS

From qrp-l@lehigh.edu Tue Sep 5 19:47:00 1995
From: Jeff Gold <JMG@tntech.edu>
Subject: [3045] OHR-400, Four Bander
Message-ID: <01HUWV5PW10Y9D5B39@tntech.edu>

Early/Late-Christmas/Birthday :-)

OHR 400, Four Band CW Transceiver-Initial Impressions

Latest offering from Oak Hills Research.

Specifications:

Receiver

RF pre-amp
Diode ring mixer
selectable AGC-manual gain control
4 pole crystal ladder filter
selectable 4 pole audio filter
very stable VFO
VFO covers 150Khz each band
RIT +/- 1Khz

Transmitter

4-5 watts all bands
adjustable from rear panel 0-full power
smooth QSK circuit
sidetone generator with level adjust
both iambic and manual key jacks
alignment tool is provided with kit

Optional Iambic Keyer kit (can be added at any time)

I haven't built a kit in a while and my personality has deteriorated proportionally. I seemed to have forgotten how therapeutic the building process is for me. Started to rationalize that I have built one of everything and that placing components on a board was just not as much fun as it used to be. I couldn't resist when I heard about the Oak Hills four bander. Four bands, three of my favorites and one that I need to spend some more time on anyway.

I anxiously awaited the arrival. My children are now pretty well grown up, no grand children in the near future, so guess this is the closest I can come for the time being to an anxiously awaited arrival. Got home from work on Friday afternoon. This was a

real biggy weekend. Three days off and the weather was suppose=20
to be nice for the first time in eight weeks. What more could I ask=
=20
for. Came in the door and there was the box, patiently waiting for=
=20
me to return from work. Having significantly matured (if you can=
=20
believe this one), I went and changed out of my work clothes=20
before taking the prize to my lair and checking it out.

The first thing I noticed when opening the box was how carefully=20
and professionally it was packed. All of the little components=20
were packed inside the case and sealed so that you don=92t=20
accidentally throw them away. There are three printed circuit=20
boards, not counting the optional keyer. The boards are the=20
absolute best I have ever come across (I have seen some as=20
good...but none better). They are solder masked and have a terrific=
=20
silk screening. There is NO question which parts go where. The=20
receiver board has the parts fairly well packed, so the very high=
=20
quality silk screening is a definite plus. =20

Another thing I have noted is that Dick really listens to his=20
customers. This is evident with the documentation. The=20
documentation comes in several sections which are individually=20
stapled. The printing is top quality and even easy for my old eyes=
=20
to read without the need for those new reading glasses (so in=20
essence the kit makes me feel a little younger). The first section o=
f=20
the documentation is the Assembly Instructions. Oak Hills has a=20
couple of pages on things you need to be aware of to make your=20
building experience more pleasant and more likely to have you=20
succeed with the project. The instructions are step by step, but not=
=20
in the obnoxious way Heath used to do it. I really appreciate the=
=20
clearness of instructions and not having to read and reread=20
something many times to figure out if what I read and thought I=20
understood is what the writer meant for me to understand. =20
Working with technical writing in the computer field I realize how=
=20
hard it is to write good instructions. Oak Hills also has started to=
=20
include very professional diagrams for the final assembly in with=
=20
the documentation. There is separate sections for each board that=

=20
has a listing of all the components, a schematic and an excellent=
=20
enlarged overlay.

The parts for each board come separately wrapped. This is another=
=20
example of Oak Hill=92s listening to the customers. For each board=
=20
the parts are separated by type, such as resistors and capacitors. I=
=20
usually hate the first stage of building. I use to take a great deal =
of=20
time separating and labeling the parts. Now I use little plastic part=
s=20
bins and dump the resistors in one, the capacitors in another and=
=20
so on. I find it fairly easy to then use my magnifying glass (even=
=20
Oak Hills couldn=92t solve the problem for me), to make sure I get=
=20
the right part when I start stuffing the board. I find that after a =
few=20
minutes of separating out the parts and documentation I can get=20
into the project fairly quickly.

The cabinet for the kit is also very high quality and has a great=
=20
paint job. The panels are beautifully screened. I believe them to be=
=20
of as good quality as the major transceiver manufacturer=92s=20
cabinets.=20

There are two distinct and equally important aspects of a kit for=
=20
me; how much fun it is to build and how much I like to operate it=
=20
when it is done. I admit it. My personality is such that I don=92t h=
old=20
much to design aspects and theoretical issues. I have found that=20
there are sufficient variable involved that even the best designs can=
=20
not work as they should when they are built. Some rigs are just=20
more fun to operate than others. I finally took some time recently=
=20
to ponder this aspect of my building experiences. I have built=20
about every kit on the market in the last 3 years. I can pinpoint=
=20

exactly what constitutes a pleasurable building experience for me. =
=20
The parts in the kit have to be high quality, the documentation has=
=20
to be clear, tested and revised to eliminate errors, no ambiguity at=
=20
all, the printed circuit board needs to be high quality and clearly=
=20
screened and separate parts list by circuit board with a clear=20
enlarged parts overlay. =20

The =93fun to operate=94 part is much more nebulous. This aspect is=
=20
very personal. I have come up with a scientific method to=20
determine this aspect. It is really quite easy. I have many rigs on=
=20
my workbench. The number and type seems to constantly change. =20
I find there are some rigs that I just keep using after the initial=
=20
testing and evaluating. The reason for this is that they seem to me=
=20
to work better and are more =93fun to operate=94. I put my Norcal 40=
=20
in this category as well as many of the Oak Hills kits I have built. =
=20
I think it is pretty amazing that a small company can put out such=
=20
high quality kits as they do. I realize they aren=92t perfect and the=
ir=20
size is a little big for SOME uses. This in no way changes the fact=
=20
that they are about the most fun to build (when building them I=20
enjoy about all the time I spend building as opposed to trying to=
=20
figure out which parts should go where and what the directions=20
really mean and why parts are missing), and for me, up there in the=
=20
=93fun to operate=94 category. =20

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: Jim.Nestor@ey.com
Subject: [3047] portable mast results
Message-ID: <00145000015783440000004*@MHS>

Thanks for the many quick responses to my request for ideas for a portable antenna mast from builder's supply type materials. I made a couple of stops at Home Depot and K-Mart to checkout the options. Here's a quick synopsis of my findings.

- 1) longest telescoping paint pole I found was only 12 feet for about \$15. Passed on that one.
- 2) bought 4 @ 5' wooden paint poles for around \$2.75 each. Nice straight and lightweight hardwood with broomhandle threads on one end.
- 3) found 8' lengths of aluminum tubing for about \$1 per foot. Sizes jumped from 3/4" to 1" to 1-1/4", too loose for telescoping.
- 4) longest fishing pole was a 12' Shakespeare surf casting rod with guides, handles, etc.. for about \$50 - obviously a non-starter.

Tried all the scrap tubing I had and couldn't find anything suitable to join the 5' handles. Too bad, would have made a nice non-conductive 20' pole. When time permits, may get some hardwood and bore it to make couplings.

Ended up using some pieces of thickwall fiberglass tubing I once bought at a hamfest. I had three pieces about 1-1/4" OD and one piece that fit nicely inside that. I screwed the spicers in place with sheet metal screws so the whole thing broke down into 4 pieces. When stacked without benefit of anything but gravity to hold them together, I had a 20' mast which I could easily walk up and sit over a large spike driven in the ground. A few nylon guide ropes and stakes hold it in place.

I tied the 4 pieces together with some bungee cord and strapped them to the cartop carrier. Rather bulky but it worked. Aside from some strange wailing at certain road speeds as the wind resonated through the "pipes" it rode just fine. Maybe with some pruning, I could have free music on the trip....

For an antenna, I followed an idea somebody mentioned and placed the MFJ Random Wire Tuner at the base of the mast feeding a non-resonant length of hookup wire as a vertical. I added four radials for 20m and 2 for 30m connected to the tuner and fed it with about 50' of RG58 on the ground up to the operating position. I used the MFJ SWR analyzer and a short piece of coax to set the tuner then replaced it with the 50' of RG58. Nice flat match on both bands.

Because of family outing, granddaughter and such didn't get much air time. However, in an hour on Sunday worked IK1, 3Z2, F6, and PA3 with 3watts on 20m. Guess it works!

Still searching for the ultimate portable mast, but have more time now that

the camping season is almost over. Would like it to be smaller and lighter than the heavy stuff I used. Also, would be nice if it all telescoped into a single tube for easier transportation. Could even take 2 of them...

May order some aluminum from Texas Towers, e.g. 4 @ 6' lengths from 1-1/4 down to 3/4. That way I'd have a 20' mast that could serve as a vertical itself or as a support for a dipole or end-fed Zepp. We'll see.

Thanks again for all the ideas, this list is GREAT!

72,

Jim, WK8G
jim.nestor@ey.com

From qrp-l@lehigh.edu Tue Sep 5 19:47:00 1995
From: Chris Doherty <doherty@lydian.scranton.com>
Subject: [3042] QRP positive
Message-ID: <Pine.3.89.9509042202.B6775-0100000@lydian.scranton.com>

Gang:

I've heard much negative stuff about signing qrp or telling the other op that you were runing 5 wattss or less. I want to inject some positive stuff.

Worked a guy tonight from VA. He gave a 559 and so did I. He was running 50 watts to a vertical and I was running 5 watts to an 80m dipole. Told him I was using QRP Plus and his comment was, "wow ur qrp plus is doing gud...I have an index labs but i did not think it would work on this band." (We were on 80 meters.)

Another time, a ham out of New Jersey was so impressed with qrp that we try to work work weekly qrp, same with the ham from New York. Now mind, we are not talking dx here. But these folks are all running 50 to 100 watts and when I tell them I'm at 5, they are amazed, because the 5 watt signal is as good as theirs. That's all. Just some positive stuff and maybe some qrp converts? CUL

-73- de N3UVR grp

0(o o)0

[illegible]

Chris Doherty <[0/0/0/0/0/0/0/0/](mailto:doherty@lydian.scranton.com)>
doherty@lydian.scranton.com

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: adam@philadelphia.libertynet.org (Adam O'Donnell)
Subject: [3039] Science fair.
Message-ID: <9509050148.AA24659@philadelphia.libertynet.org>

Umm...

There are a bunch of science fairs coming up. They are offering \$20,000, \$25,000, and \$50,000 scholarships... I really can't pass this up.

The awards are given by category; last years winner for engineering was an electron wheatstone bridge. ohhh... damn. I can clean up here.

Since time is of the essence (sp.), I am considering the following, low cost, low effort, high success rate project.

"A Critical Analysis of 30 meter SuperHet kit rigs".

I would pick up a few (probably 3) of the popular rigs out there, adjust the power output so that all three are running about 1 1/4 watts. Maybe I could operate for an hour each night with a different rig for about three weeks. I would compare distance of each contact, RST, stuff like that.

What do you think?

72

--

Adam O'Donnell, N3RCS
Amsat: N3RCS@AMSAT.ORG
Internet: ADAM@LIBERTYNET.ORG

"I want to know how God created this world. I am not interested in this or that phenomenon. I want to know His thoughts, the rest are details."

-- Albert Einstein

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: smorley@ix.netcom.com (Stephen Morley)
Subject: [3043] unsubscribe
Message-ID: <199509051130.EAA19274@ix7.ix.netcom.com>

unsubscribe smorley@ix.netcom.com

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: Bill Acito 05-Sep-1995 1425 <acito@asdg.ENABLE.dec.com>
Subject: [3062] W1AW/qrp tomorrow
Message-ID: <9509051826.AA28148@us1rmc.bb.dec.com>

Planning a visit to League Headquarters tomorrow. I'll bring some
qrp rigs with me, and hopefully activate W1AW/qrp. Look for me on
30, 40, or 20 (based on what's open, and who else is operating)
on the calling frequencies, during their public operating time
(14-17Z?)... I have to check the exact schedule in QST.

b

. - I own my own words -

Bill Acito	d i g i t a l	kc1gs
acito@asdg.enet.dec.com		qrp-ne 260
Digital Equipment Corporation, Hudson, MA		norcal 1147
		arrl life

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: Bill Acito 05-Sep-1995 1508 <acito@asdg.ENABLE.dec.com>
Subject: [3063] W1AW/qrp tomorrow (correction)
Message-ID: <9509051907.AA29964@us1rmc.bb.dec.com>

|Planning a visit to League Headquarters tomorrow. I'll bring some
|qrp rigs with me, and hopefully activate W1AW/qrp. Look for me on
|30, 40, or 20 (based on what's open, and who else is operating)
|on the calling frequencies, during their public operating time
|(14-17Z?)... I have to check the exact schedule in QST.

Make that 17 to 20:00Z (1pm to 4pm Eastern)

b

. - I own my own words -

Bill Acito |d|i|g|i|t|a|l|
acito@asdg.enet.dec.com
Digital Equipment Corporation, Hudson, MA

kc1gs
qrp-ne 260
norcal 1147
arrl life

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: Joseph Cooper <joe@westonia.com>
Subject: [3057] Weekend Adventure on the Roof
Message-ID: <m0sq4Sm-0010IRC@gpu.westonia.com>

I had great fun this weekend putting up a very nice G5RV antenna and since I'm still alive I thought I'd share some ideas about it.

Like many, I have a small lot size so the key was an antenna design that would be able to fit. The one advantage that I had to work with was having a very tall house with the chimney being the placed in a good location for a mast.

I chose the G5RV design since it can be used as an inverted V. The particular model that I chose supports 80 meters with out traps and having a total length of 102 feet (or two 51 foot legs). The centre (Canadian spelling) feed of the antenna is 31 feet of 450 ohm ladder line connected to a 4:1 balun supplied.

In making the mast I first considered a metal one, but I had read that it is better not to as it may act upon the tuning of the G5RV. Instead I created a mast from a 1 1/2 inch PCV tube of 12' in length with a 12' wooden dowel placed inside of the pipe for rigidity. It is surprisingly light and strong as a result. I spray painted it sky blue in order to keep it make it less visible (and it works).

To add ease of service I added a lanyard with a pulley for raising and lowering the center feed. Since this is Canada I built a box around the pulley to protect it from ice and snow.

To attach the mast to the chimney I used a Radio Shack heavy duty antenna mount designed for that purpose. It is well built and easy to use. Simply

straps to the chimney using metal bands and then you ratchet the bands tight.

The Mast was manageable by myself and proved to be no problem attaching to the mount.

Once that was up it was a simple job to attach the antenna and raise it up. I do take my time at this point, and unwind the wire and download slowly in order to keep it from kinking.

The antenna needs a minimum of 70 feet of lead in to tune properly and this proved no problem.

The results are very impressive. The antenna is a very quite design and the rcvr gain is impressive. For example; WWV on 10 MHz went from 10db over S9 from my old dipole to just below 60 db (!) (results may vary..etc.).

I have not had a chance to try it with my xmitter yet, but I'll report soon.

Plug: The Antenna was made by Van Gordon Engineering P.O.Box 21305 S.Euclid OH 44121

It cost me all of \$29.00 U.S.(!) They sell a 'mini' version for 40-10m.

I'd appreciate any feedback from others with G5RV's.

* Joseph Cooper:-VE3FMQ-QTH-East York-near Toronto Ontario Canada *
* Interests are:- BCB and VLF Radio-Woodworking-Steam Railroads - *
* -Nikola Tesla-Antique Radios-Crystal Radios-Travel-Burmese Cats *
* FAX (416) 423-7782 9:00pm to 5:00pm EDST Monday To Friday Only *

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: "S. Miller" <smiller@motown.ge.com>
Subject: [3051] WWW site for qrp and Boatanchors
Message-ID: <199509051705.NAA08774@bear.MOTOWN.GE.COM>

Does anyone know how to get the qrp-1 www site? I used to have the location: <http://> (etc. etc.) but I lost it and cannot find the earlier references to it I had from this list. I believe it was maintained by AB4EL, Steve Modena.

TIA

Steve Kd2Ed

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: JCoote@aol.com
Subject: [3064] Re: Best Mobile HF?

Message-ID: <950905172430_91758297@mail04.mail.aol.com>

My mobile setup is an Icom IC-735 and AH2 antenna tuner.

The AH2 is not one of those coax-only tuners used by lids to "forcefeed" 80 meters into a CB groundplane- It is designed for 3-30 MHz coverage with a nine foot whip, or 1.8 - 30 MHz coverage with a fifty foot (or longer) wire.

I use the AH2 tuner as intended, right at the base of a whip mount in my full-sized '86 Ford van. I did not use the dorky looking Icom HF mobile whip, and instead used Antenna Specialists mount, ball, spring and whip. The tuner is on the inner wall of the van, right at the antenna feedpoint.

The AH2 works great at the base of center-loaded HF whips (like the Hustler series) or with helical whips. It will not (for example) forcefeed a 20 meter whip on 80 meters and you will still have to change whips for each band. I ran some tests with the AH2 tuner and did get better field strength readings when I used Hustler KW whips (center loaded) or Mobile Mark "Heliwhips" (fat helical antennas) compared to using the nine foot whip. Of course center-loaded or helical whips are better than base-loading a short whip.

When parked, I have used a combination of Hustler masts and my nine foot whip to extend the whip beyond nine feet. This helped a little on 40 and 80.

Also when parked, I have attached a random length wire to the ball mount or to the end of the whip. This provides 160 meter coverage and better coverage on 80-40-30 than with any whip antenna. A 50' to 150' horizontal wire at 6' to 25' above ground makes a good high-angle antenna for local contacts (30-400 miles) on 160-80-40 without the skipzone problems found in vertical, or other low-angle antennas. The military calls this NVIS.

How the system works: You dial in any frequency and press the tune button. In a second or two the tuner head gives you a green LED meaning OK to transmit. No fumbling with SWR and tuner controls.

The tuner is admittedly expensive for some tastes, but the IC 735 alone may be modified for QRP powers so that the RF power control (a slider) will cover 3-100 watts. The IC-735 QRP mod involves no component work, just tweak a few pots inside the radio. Maybe you can locate a used IC-735 somewhere.

If you go mobile without the autotuner setup, there are several good center-loaded and helical whip antennas on the market. Thick conductors in antenna coils or windings indicate a good product.... some antennas use thin wire, very lossy (mobile 50-ohm wirewound resistors) but better aerodynamics.

Forget about bumper mounts. Too many things to go wrong with connections, especially ground and the antenna is too low. I recommend the Antenna Specialists 3/8" ball mount with spring (not the lightweight CB toy

version). These are more rugged than Hustler and other brand X mounts. Get the mount as high as possible. On my van, I have my HF and VHF-lowband ball mounts as high as possible, just an inch down from the roof edge and raingutters. (I have always doubled over in laughter at CB'ers and hams who mount a whip at a low point of a truck or van, with the whip parallel to the vehicle body... 2" away... and wonder why they "ain't getting out").

Finally, many vehicles have ignition systems, electric fuel pumps and other gadgets which throw out hash on the HF bands. After installing the HF radio with good #8 or #6 cables going direct to the battery positive and negative, you may have to do some sniffing to find the sources of the RF noise. My Ford E250 has *three* noisy fuel pumps (a dual tank system) and I still haven't gotten around to trying ferrites or capacitors in their leads. Some car manufacturers may have update sheets for mechanics on filtering AM or other radio noise problems.

73, Jay
WB6AAM
WB6AAM@K6VE.#SOCA.CA.USA.NA

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: Wynn C C <wyn@stc06.ctd.ornl.gov>
Subject: [3053] Re: Dual Tree Supports for Vertical Loop
Message-ID: <Pine.OSF.3.91.950905133951.15806B-1000000@stc06.ctd.ornl.gov>

>
> The 4th tree is 61 feet away from and perpendicular to my center support
> tree and is looking like a nice spot for a 60' x 40' vertical loop. My
> question - How should I support the vertical loop corners between the two
> trees? I am thinking about a pulley/weight arrangement for the corners on
> one side with nylon cord supports to the tree at the other. Also, does anyone
> have strong feelings about how the loop should be polarized (since I have a
> choice)? I will initially be using it on bands to test performance, but from
> what I have read, polarization is not a big deal on HF.
>
>
> 72
> john, n3qoo

John,

You did not specify the shape of your loop, circular, square, delta, inverted delta, rectangular. The shape can affect the best means of mechanical suspension. According to W1FB, the circular loop has the highest gain, followed by the square, then delta. Also the vertical

loop does not have to be exactly vertical. This can also accomodate a compromise suspension system. I believe the bottom or top feed gives you horizontal polarization and the side feed gives you vertical for a full wave loop.

Which to choose depends on the propagation characteristics you are looking for. A skewed polarization might work best, although I have not seen it tried.

72/73
Clay N4AOX
wyn@onrl.gov

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: eighmy@scott.net
Subject: [3065] Re: Dual Tree Supports for Vertical Loop
Message-ID: <199509052223.RAA14639@koala.scott.net>

>a compromise suspension system. I believe the bottom or top feed gives
>you horizontal polarization and the side feed gives you vertical
>for a full wave loop.

>Which to choose depends on the propagation characteristics you are
>looking for. A skewed polarization might work best, although I have
>not seen it tried.

Try feeding it from one of bottom corners. ELNEC simulations performed by a local ham (KE4ID) show that this configuration optimizes the take-off angle for DX. Patterns from side-fed loops have a very low angle of radiation while bottom/top fed loops have a very high angle of radiation. I have used several corner fed loops with excellent results. Unfortunately, I don't have the real estate to do an A-B comparison between corner and side fed loops.

72,
Gene
wd4mps

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: bfollett@ditell.com
Subject: [3052] Re: Micro Broadcasting Kits

Message-ID: <199509051716.LAA29074@solar.ditell.com>

Brian wrote about Microbroadcasting Kits:

I might add that William Cooper, a Constitutionalist candidate for President who broadcasts on WWCR, 5065Khz at 0400Z on weekdays is now pushing QRP FM transmitters for "all the Patriots out there" to get the word across in their local communities.

He is selling a 5 Watt FM xmitter for \$100 in kit form, and \$150 assembled with "free dipole antenna thrown in".

He suggests that the FCC doesn't care about FM broadcasting w/o license as long as the broadcaster selects an un-used channel.

Looks like several of our militia neighbors are going to become QRP operators!

For those that wonder how I can listen to this stuff, I assure you, its one of the best ways of studying how paranoia of the *extreme* right wing is spread...I usually can't make it through an entire hour though.

Isn't QRP fun?, 72, Bob

Bob Follett WA7FCU

bfollett.ditell.com

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995

From: prvalko <prvalko@Oakland.edu>

Subject: [3054] Re: Micro Broadcasting Kits

Message-ID: <Pine.OSF.3.91.950905140011.2343A-100000@saturn.acs.oakland.edu>

On Mon, 4 Sep 1995, SCN User wrote:

> If you are interested in Food Not Bombs, call 1-800-884-1136. If you
> want to know about the meeting I went to write me at nwqrp@scn.org.

Sounds like an interesting organization.

73! =paul= wb8zjl

PEACE... Through superior firepower

ObQRP: Anybody work the Mi-QRP Labor Day Sprint Sunday night? I was up at the cottage without a "real" qrp rig so I hadda use my ol' Triton IV

with the drive cranked down. The antenna is a HAMSTICK (tm) on a three magnet mobile mount just stuck up the the (kinda flat part of the dormer's) roof. This crummy set up is as marginal as it gets, yet I worked a dozen contacts including a station in CA.

If you want to see the cottage, just <http://www.oakland.edu/~prvalko>
I'll take a picture of the operating position next and post that too.

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)
Subject: [3055] Re: QRP PLus from Index Labs
Message-ID: <199509051859.0AA27657@dartvax.dartmouth.edu>

Hello Jim, This is a first generation rig, and as with all firsts there is indeed a down side, but not down enough to stop me from buying and enjoying the radio. You are quite correct, there is no other comparable rig for the money. The 555 will cost you about \$900 with all of the band cards. It is not without it's own unique set of problems. I have heard they fade while transmitting.

You will wait, and wait and wait, for the rig to be delivered, but it is worth it.

<snip>

I know there have been several posts here about the Index Labs QRP Plus, and
>I have read several. Unfortunately, I didn't save any of them. I do
>remember that everyone held the QRP Plus in high regard.
>
>It almost looks too good to be true, at the price. Is there any downside to
>this rig? How long does it take to receive, after being ordered? I
>understand that IL builds each one, as ordered.
>
>A friend just got a Ten-Tec 555, and I had considered its QRP sibling, but
>don't like the idea of having to change modules with each band change.
>73, and have a great holiday weekend!
>
>Jim, KF6CR
>
>
>
>

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: lhalliday@creo.bc.ca
Subject: [3060] Re: QRP Plus from Index Labs
Message-ID: <9508058103.AA810334445@mail.creo.bc.ca>

Funny folks should mention Index Labs - a couple of local QRPers (including VE7PCC) and myself went on a day trip to Gig Harbor a week and a half ago.

Bruce very kindly showed us around his house-cum-research facility - he contracts the production out to a company who make equipment for folks you've heard of. He had a QRP Plus hooked up to a makeshift antenna (a piece of wire strung from the verandah out to a tree), so we tuned around. The propagation was dismal, but the tuning, audio quality, filter response, and so on were all first rate. It was neat to find RTTY signals and select either tone.

The internals really caught my eye. Quality boards, quality components, and the thing is built like a battleship. The case is thick steel, which Bruce said was originally to lessen hum modulation in the VCO from nearby power supplies. The lossy steel probably improves the radio's RF stability, as well. The downside is that the radio is quite heavy. :-(

Such a radio is very tempting to take with me when I travel. I've taken a TS-120V with me a couple of times, which is fine when travelling by car, but a bit big to take on a plane...

73 from Burnaby,
laura VE7LDH

Email: lhalliday@creo.bc.ca / ve7ldh@amsat.org

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: "Andrew Comas" <Andrew.Comas@ska.com>
Subject: [3061] Re: QRP Plus from Index Labs
Message-ID: <9509051657.ZM4649@rangers>

I wanted to reply to your 'whistle' list from Aug 27, but haven't gotten around to it until now. My list is much short then yours (not reproduced here). I tested my QRP+ into a dummy load. But from your list I heard:

3.580.0 Birdie
3.655.1 < S1
3.749.6 < S2 (you had .2 as freq)
3.752.6 < S1

7.142.1
7.160.2

10.113.4 S1
14.083.2 Birdie

21.077.5 S1
21.161.5 Birdie
21.250.6 S1
21.418.7 Birdie

28.076.8 < S1
28.244.9 < S1
28.418.3 < S1

Where a 'birdie' would be impossible to listen to a station on that frequency and S2 would be a hinderence and S1 would be a minor annoyance.

Also I've picked up the SP-100 speech processor from GLS and that has been interesting. Testing into a dummy load (to set the pots on the SP-100 correctly) showed a 1 Watt to 1.5 Watt improvement on my wattmeter (Oak Hill WM-1). Now instead of yelling into the mic to get 1.5 Watts out, you can speak loudly and get 2 Watts out average power. Nevertheless, you can tell you're running a speech processor when listening, but it boosts the average SBB power. I have not tried it on the air yet. Work has been really busy. When I get a chance I'll post the on-air results.

73s de Andrew AA2UG

From qrp-1@lehigh.edu Tue Sep 5 19:47:00 1995
From: Joseph Cooper <joe@westonia.com>
Subject: [3040] Re: Science fair.
Message-ID: <m0spoly-0010FbC@gpu.westonia.com>

>

>There are a bunch of science fairs coming up. They are offering \$20,000,
>\$25,000, and \$50,000 scholarships... I really can't pass this up.

>

>Many years ago I won first prize at a science fair. I went in with no expectations and selected a topic that I was interested in. I enjoyed what I did and shared what I found in my research through the display I constructed.

I was absolutely shocked when I won.

My reward for winning was a rubber chicken dinner, a dull after dinner speech and a high school textbook on science.

What made it worth while was when people I did not know, who read the local newspaper and saw that I had won the prize, came up and congratulated me on my accomplishment.

>From that I felt good about myself, my community and the value of science.

Why do I get the feeling that something has been lost since the time that I won that first prize and today ?

Oh well, I guess I'm just out of touch with the times.

To the young fellow who is persuing this goal: by all means do so. But remember, it is not the material result of the endeavor that is important. That can be taken away from you at any time. It is the process that you are involved in which is important and how you act with in it. Your character is your wealth, not the damn money that they tempt you with. If you can go in and legitimatly be yourself and show the best of yourself, then you have won the first prize.

End of lecture.

* Joseph Cooper:-VE3FMQ-QTH-East York-near Toronto Ontario Canada *
* Interests are:- BCB and VLF Radio-Woodworking-Steam Railroads - *
* -Nikola Tesla-Antique Radios-Crystal Radios-Travel-Burmese Cats *
* FAX (416) 423-7782 9:00pm to 5:00pm EDST Monday To Friday Only *